

ABSTRACT OF THE DISCLOSURE

Methods and systems are provided for transferring data and for pausing the transfer of data when certain conditions are met. In one embodiment, an error correcting code (ECC) encoder/decoder reads a codeword from a data storage device and decodes the codeword. The ECC encoder/decoder corrects any correctable errors in the codeword and outputs information regarding the condition of the codeword, such as the number of detected full errors and the number of erasures. The number of full errors is compared with a full error threshold value. When erasures are available, the number of erasures can be compared with an erasure threshold value. Both threshold values may be set at levels below the maximum levels at which errors can still be corrected. When either of the threshold values are exceeded, the transfer of data is paused and a processor is interrupted so that further action may be taken.

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